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SEA-SEE CHARACTERISTICS AND MISSION APPLICATIONS(U)  
NAVAL OCEAN SYSTEMS CENTER SAN DIEGO CA  
W W PERKINS ET AL. MAR 84 NOSC/TD-652

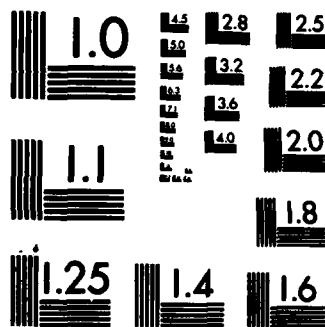
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NOSC TD 652

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## Technical Document 652

### SEA-SEE

### Characteristics and Mission Applications

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March 1984  
Final Report

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San Diego, California 92152

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ADMINISTRATIVE INFORMATION

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Released by  
E. P. Cooper, Director for  
Science and Technology

PK



**SEA-SEE**  
**POTENTIAL MISSION APPLICATIONS**

**OPERATIONAL CAPABILITIES**

Marine mammal investigation  
Shark studies  
Kelp bed investigation  
Shallow water artificial reef investigation  
Acoustic studies  
Support for diving operations

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## GENERAL CHARACTERISTICS

### DESCRIPTION

The Sea-See is a catamaran hull type craft outfitted with an underwater observation compartment. The craft is designed for operations in Southern California water. It is capable of fully self-contained support for periods of one week or longer. With the observation compartment extended, the vessel is capable of maintaining 3 knots and serves as an excellent platform for the investigation and research of marine mammals, sharks, and near surface ecology. In addition, the fiberglass hull provides an ideal platform for acoustic studies.

### General

Hull . . . . .	Catamaran type, styrofoam hull
Length . . . . .	50 ft
Beam . . . . .	20 ft
Power . . . . .	Two GMC 353-N diesel engines
Draft . . . . .	3.5 ft with observation capsule up; 10 ft with observation capsule down
Speed . . . . .	7.5 knots with observation capsule up; 3 knots with observation capsule down
Range . . . . .	300 miles
Electronic Equipment . . . . .	Sonar Corp. Model 115 marine radiotele- phone  Raytheon ADF  Regency-Polaris N72 all marine band ADF  Raytheon Model D-120m depth indicator, 250-ft maximum  Raytheon Model 2800 radar  Motorola 35-watt UHF FM transmitter- receiver  Motorola 15-watt UHF FM transmitter- receiver portable  ARC/27 UHF Mil radio 200-300 MHz  Loran C, M, L 320 Navigator Wood Free- man autopilot

Binaural hydrophone array and system  
frequency range, flat  $\pm 3$  dB, 20 Hz to  
100 kHz

Lockheed Model 417 instrumentation tape  
recorder-reproducer, seven-channel  
direct record-reproduce, frequency  
response  $\pm 3$  dB, 200 Hz to 100 kHz at  
30 in/sec

Electrical Power . . . . . 12-volt and 24-volt DC, 130 amps

Diesel 110-115 volt AC, 60-cycle, 10,  
Onan 5 kW motor generator

CML Model MRS 500 24-volt DC to 110-115  
AC inverter (500 watts)

Accessories . . . . . Electric anchor winch

Four transducer underwater pass-through  
in observation capsule

13 ft 6 in. Boston Whaler, 20 hp John-  
son outboard motor

Zodiac inflatable boat

Instrumentation console

Hyab crane 3300 max lift - 1054 lb, at  
max. extension 14 ft 9 in.

Programmable gift Model 4000T precision  
depth recorder

500 watt inverter

Personnel . . . . . Four scientists, two crew, observation  
capsule seats two

Sleeping accommodations are provided  
for the crew and two scientists with a  
galley, head for hotel services

Photographic capability, still and  
motion picture



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